

REMARKS

The Office action dated July 30, 2002 has been carefully considered. In the Office action, claims 1-8, 10-15, 17, 19-25, 27-39 and 43-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by Shigemi et al, U.S. Patent No. 6,279,006 (hereafter "Shigemi"). Claims 9, 16, 18, 26 and 40-42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shigemi in view of Straub, U.S. Patent No. 5,905,492 (hereafter "Straub"). By the present amendment, claims 1-3, 7, 14, 17, 30 and 36 have been amended, and the rejections traversed as explained in the following remarks. Note that the claim amendments were made for purposes of clarification and/or minor corrections, and were not for purposes of patentability, as applicants submit that the claims have been, and continue to be patentable over the prior art of record. Reconsideration is respectfully requested.

At the outset, applicants question the Office action's dates in general, including the validity of the §102(b) rejection. First, applicants submit that the present invention was filed on May 20, 1999, whereas page 2 of the Office action erroneously states that the original application was filed on 6/22/99. Applicants note that the cover (Office communication mailing) page of the Office action correctly indicates that the present invention was filed on May 20, 1999. Applicants are unsure as to why the Office action is inconsistent, but request that any inconsistent date information be corrected to reflect the May 20, 1999 filing date.

Second, applicants believe that the anticipation rejections based on Shigemi were incorrectly labeled as §102(b) rejections. In particular, 35 U.S.C. §102 states that "A person shall be entitled to a patent unless ... (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one

year prior to the date of the application for patent in the United States” Shigemi’s filing date is October 14, 1998, claiming priority to a Japanese patent application of April 14, 1998. The Shigemi patent, US 6,279,006, issued on August 21, 2001. Note that the contents of a foreign patent application should not be relied upon as prior art until the date of publication (i.e., the insertion into the laid open application) can be confirmed by an examiner’s review of a copy of the document. See MPEP § 2127. Assuming for the sake of argument that Shigemi did anticipate at least one claim of the present invention, the Office action has provided no evidence that Shigemi was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the present application.

Instead, because the present application was filed on May 20, 1999, any anticipation rejections should have been alleged under 35 U.S.C. § 102(e), whereby applicants, if desired, would have the right to establish invention of the subject matter of the rejected claim prior to the effective date of the reference or activity on which the rejection is based, that is, applicants should be able to “swear behind” the Shigemi reference. Thus, applicants contest the §102(b) rejections as being improper, and expressly reserve the right to establish invention of the subject matter of the rejected claim prior to the effective date of the reference or activity on which the rejection is based. Notwithstanding, applicants submit that the claims are otherwise patentable over Shigemi, because Shigemi fails to teach or suggest the claimed subject matter as discussed below, and actually teaches away from the claimed invention.

Turning to the § 102 rejections, the present invention is generally directed towards behaviors, in which an encapsulated component (e.g., object), external to a document, is invoked to change the behavior (e.g., effects such as style, behavior, and/or display) of a represented

element of that document. The associations between elements and external behavior components may be maintained in cascading style sheets, inline with the elements, and/or in various formats. When the document is provided to a renderer and the renderer parses the element in the document, the renderer accesses the associated external component to modify a behavior of the page image, by running code such as script-based code.

Significantly, (and unlike Shigemi as discussed below), each behavior component is external to the document and encapsulated. As a result, for example, a library of consistent, reusable behaviors may be defined and made available for use in designing and authoring web pages. Similar to a library of functions, the same behavior component can be invoked as needed from different documents and interfaced with consistently, without requiring customization and so forth. Thus, not only may a single behavior may be shared among elements of a document, but a behavior component can be reused across other documents. Behaviors also make the process of creating dynamic pages less expensive and more stable because an engineer is not required to apply individual script to every page, and encapsulation means that the behavior component's functionality is isolated and accessible only via defined interfaces.

Note that the above description is for informational and example purposes only, and should not be used to limit the claims, which are discussed below.

In direct contrast to the present invention, Shigemi specifically teaches that electronic documents to be managed are managed as management objects. Shigemi, column 9, lines 10-11. Significantly, Shigemi quite clearly teaches a model in which each management object (document) *internally contains* the contents, the descriptions of those contents, and the *operations on the contents*. See Shigemi generally, including FIGS. 1-3, 6, 7 and their accompanying text. Simply put, in Shigemi any data operation is internal to that managed

document object, in contrast to the present claims, which specifically recite that a behavior component is external to the document or documents.

The Office action has apparently misinterpreted Shigemi's *separation* of internal document content from internal operation within the same object as somehow teaching or suggesting external behavior components, (which also provide the benefits of separation). However, not only is Shigemi silent as to external behavior components and/or encapsulated ones, but Shigemi generally asserts that the managed object model for containing a document (with internal operations on its data) is better than existing technology (such as DynamicHTML (DHTML)) because the managed object model facilitates electronic document management. As such, Shigemi teaches away from the concept of behavior components that are external, encapsulated entities. Note that Shigemi also emphasizes the advantages over this internally-coupled managed object model over DHTML, (Shigemi, column 7, lines 5-14, and FIG. 7, which contrasts DHTML documents with Shigemi's managed object model), whereas the present invention integrates well with DHTML (and significantly improves prior DHTML via the external, encapsulated components). Indeed, although Shigemi accomplishes internal separation, any reusability is limited to within the same management object (document). Such a model is far less flexible and is generally less stable than the system and method claimed in the present invention.

By law, in order to support an anticipation rejection, the Office action is required to show that each and every element of the claimed invention is disclosed in a single reference, and that each element is arranged as in the claim. Shigemi, which fails to disclose or suggest encapsulated and/or external behavior components as recited in each of the independent claims, e.g., such that different documents can access the same behavior components, and actually

teaches away from such a concept, does not come close to meeting these requirements. Thus, claims 1-8, 10-15, 17, 19-25, 27-39 and 43-47 are patentable over Shigemi as a matter of law. Reconsideration and withdrawal of these rejections is respectfully requested.

Regarding the § 102 rejections of the dependent claims, applicants submit that the dependent claims are patentable over Shigemi for at least the foregoing reasons, and thus will only provide a few examples that emphasize the difference between Shigemi and the claimed subject matter. For example, regarding the rejection of claim 4, Shigemi's changing a service is not the same thing as changing the location of the representation of a rendered element as recited in claim 4. In contrast to claim 6, the management objects in Shigemi essentially *are* the documents, not components external to a document, as recited. Further, the text of Shigemi cited against applicants in rejecting claim 7 has nothing to do with reusing an external behavior component between two documents, as essentially claimed. Regarding the rejection of claims 8 and 20, Shigemi is silent as to COM (component object model) objects and/or their interfaces, let alone with respect to external components. Reconsideration and withdrawal of these (and other similarly) unsupported rejections is respectfully requested.

Turning to the §103(a) rejections of claims 9, 16, 18, 26 and 40-42, by law, in order to establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In addition, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Further, if prior art, in any material respect teaches away from the claimed invention, the art cannot be used to support an obviousness rejection. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed Cir. 1997).

Applicants submit that not only do Shigemi and/or Straub fail to disclose the recited limitation of encapsulated and/or external behavior components, but moreover submit that Shigemi directly teaches away from such a concept. The deficiencies of Shigemi are discussed above, and will not be repeated herein for purposes of brevity, except to reiterate that in Shigemi, the document is a managed object with everything (contents, descriptions and operations) internal within that object. Straub is silent as to such a concept (as “downloading updating resources” has nothing to do with downloading an external behavior component).

Thus, even if somehow permissible to combine Straub with Shigemi (which applicants submit it is not), the claim limitations are not found by such a combination. Further, Shigemi teaches away from the claimed invention, and thus cannot be used to support an obviousness rejection as a matter of law. For at least these additional reasons, applicants submit that the obviousness rejections of claims 9, 16, 18, 26 and 40-42 are improper as a matter of law, and respectfully request reconsideration and withdrawal of the rejections.

Also as a matter of law, obviousness may not be established using hindsight obtained in view of the teachings or suggestions of the applicants. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). To guard against the use of such impermissible hindsight, obviousness needs to be determined by ascertaining whether the applicable prior art contains any suggestion or motivation for making the modifications in the design of the prior art article in order to produce the claimed design. Even the mere possibility that a prior art teaching could be modified or combined such that its use would lead to the particular limitations recited in a claim does not make the recited limitation obvious, unless the prior art suggests the desirability of such a modification. *See In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

As discussed below, the prior art contains nothing at all that supports the conclusion that any of the claims are obvious. In the present case, it is clearly evident that the Examiner can only have used impermissible hindsight gleaned from applicants' own teachings to locate Shigemi and Straub, and thereafter attempted to fit their teachings into applicants' invention, even though neither teach external behavior components, and Shigemi's teaches away from the present invention. In fact, the alleged motivation in the Office action for combining Shigemi with Straub are nothing more than broad conclusory statements generally taught by applicants and/or unsupported by the prior art of record, (e.g., "... it would have provided the capability for controlling formatting of HTML documents in a display" or "... it would have provided the capability for obtaining updating resources more rapidly."

It is unclear from such broad, conclusory statements how this would lead one of ordinary skill in the art to combine these references, or why this might be desirable, or what might be accomplished thereby, let alone how the present invention could somehow result from such a combination. Instead of presenting any specific evidence of motivation to combine, the Office action has only made these conclusory statements that are wholly unrelated to the claims, in order to allege obviousness. However, such broad conclusory statements, standing alone, are not evidence of obviousness. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). In the present application, the Office action has essentially done what is not proper by law, and used applicants' teachings as a blueprint, using an (incorrectly) modified Shigemi for some of the claimed limitations, and, without any specific evidence of motivation to combine beyond applicants' teachings, has hunted for a reference that might supply the limitations present in the application but missing from Shigemi. Applicants submit that the §103(a) rejections are

thus improper as a matter of law for at least the forgoing reasons, and respectfully request withdrawal of the §103(a) rejections of the claims based in any way on Shigemi and/or Straub.

CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that claims 1-47 are patentable over the prior art of record, and that the application is otherwise in good and proper condition for allowance. Entry of the foregoing Amendment and withdrawal of the rejections are respectfully requested.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (425) 836-3030.

Respectfully submitted,



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Appendix A

(marked up copy of the claims amended herein)

1. (Amended) A computer-readable medium having computer-executable instructions, comprising,

receiving a document having an element thereon, the document including information associating the element with an external component that is encapsulated and external to the document such that the external component may be used with a different document;

rendering a page image corresponding to at least part of the document, the page image including a representation of the element; and

accessing the external component for determining a behavior of the representation of the element rendered on the page image.
2. (Amended) The computer-readable medium of claim 1 further comprising, receiving an event, and wherein accessing the external component is performed in response to the event.
3. (Amended) The computer-readable medium of claim [2] 1 further comprising, modifying an appearance of the representation of the element in response to accessing the external component.
7. (Amended) The computer-readable medium of claim 1 further comprising, receiving a new document having another element thereon, the new document including information associating the other element with the external component, rendering a new page

image corresponding to at least part of the document, the new page image including a representation of the other element, and accessing the external component for determining a behavior of the representation of the other element rendered on the new page image.

14. (Amended) The computer-readable medium of claim 1 wherein the document includes information associating the element with a second external component, and further comprising, accessing the second external component for determining a behavior of the representation of the element.

17. (Amended) A method of providing dynamic effects to an HTML document, comprising [the steps of], encapsulating code in an external component for affecting the behavior of elements, including elements of different documents, inserting an element into a document, attaching a reference in the document to associate the element with the external component, and providing the document to a renderer.

30. (Amended) In a computer system, a system for rendering page images on a display, comprising:

an external component encapsulating code for modifying the behavior of elements, including elements of different documents; and

a renderer connected to the display for rendering page images, the renderer receiving a document having an element specified therein and information associating the element with the external component, the renderer rendering a page image corresponding to the document and accessing the external component for modifying the page image.

36. (Amended) The system of claim 35 wherein the renderer calls the external component a plurality of [time] times to draw information on the page image, and the renderer draws information on the page image between at least some of calls to the external component.